**NAME OF WORK:- Consultancy Services for preparation of Survey, Designs, Drawing, Estimate preparation etc.,(Detailed Project Report) For the work of Improvements to roads and drains at Kenchenahalli, Nagenahalli, AK Colony and GPN Colony in Ward No.02 Chowdeshwari Ward**

## Abstract

| Sl. No. | Description | Amount in Rs |
|---|---|---|
| 1 | KENCHENAHALLI | |
| | Construction Works Cost | 8707566.90 |
| 2 | NAGENAHALLI | |
| | Construction Works Cost | 8707270.44 |
| 3 | GPN COLONY | |
| | Construction Works Cost | 8715767.06 |
| 4 | AK COLONY | |
| | Construction Works Cost | 8710460.49 |
| | Total Construction Cost | 34,841,064.88 |
| | GST 12% | 4,180,927.79 |
| | DPR & PMC Preparatyions | 576,218.09 |
| | Miscelleneous & Rounding off | 1789.24 |
| | Grand Total | 39,600,000.00 |

Section Engineer

Assistant Executive Engineer
BBMP,Byatarayanapura
YALAHANKA

Executive Engineer
BBMP,Byatarayanapura
YALAHANKA
14/11/19

Technical Sanction
Accorded For Rs 396.00 Lakhs only
Head of A/C...P.3727.....
CER NO :...173..... Dt:06.11.2019

TA CE (YNK)

Administrative Approval
Accorded For Rs 396.00 Lakhs Only
Head of A/C...P.3727.....
CER NO :...69..... Dt:27/03/2020

E.E. (Project)

**NAME OF WORK:- Consultancy Services for preparation of Survey, Designs, Drawing, Estimate preparation etc.,(Detailed Project Report) For the work of Improvements to roads and drains at Kenchenahalli, Nagenahalli, AK Colony and GPN Colony in Ward No.02 Chowdeshwari Ward**

## Abstract

| Sl. No. | Description | Amount in Rs |
|---|---|---|
| 1 | KENCHENAHALLI | |
| | Construction Works Cost | 8707566.90 |
| 2 | NAGENAHALLI | |
| | Construction Works Cost | 8707270.44 |
| 3 | GPN COLONY | |
| | Construction Works Cost | 8715767.06 |
| 4 | AK COLONY | |
| | Construction Works Cost | 8710460.49 |
| | **Total Construction Cost** | **34,841,064.88** |
| | **GST 12%** | **4,180,927.79** |
| | **DPR & PMC Preparatyions** | **576,218.09** |
| | **Miscelleneous & Rounding off** | **1789.24** |
| | **Grand Total** | **39,600,000.00** |

Section Engineer

Assistant Executive Engineer
BBMP,Byatarayanapura
YALAHANKA

Executive Engineer
BBMP,Byatarayanapura
YALAHANKA
4/11/19

Technical Sanction
Accorded For Rs 396 lakhs only
Head of A/C ...P3727...
CER NO :...173..... Dt:06.11.2019

TA CE (YNK)

## BRUHAT BANGALORE MAHANAGARA PALIKE

### Name of Work: Developments of roads and drains at cross roads of Kenchenahalli Surrounding in Ward No. 02

| Sl No | Description of work | Unit | No | Length m | Breadth m | Depth m | Quantity | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| 1 | KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (P.No-143, I.No-19.1) | | | | | | | | |
| | **For RCC Drain** | Cum | | | | | | | |
| | **Kenchenahalli** | | | | | | | | |
| | Kenchenahalli Main road to Dhobi Ghat Road | | 2 | 160.00 | 1.30 | 1.10 | 457.60 | | |
| | Munibairappa House to Yelahanka Lake | | 1 | 350.00 | 1.20 | 1.10 | 462.00 | | |
| | For RCC Culvert | | 1 | 4.80 | 1.40 | 1.00 | 6.72 | | |
| | | | | | | | **926.32** | 215.28 | **199418.17** |
| | Basic Rate Rs.= | 130.00 | | | | | | | |
| | Add 6% A.W Rs. = | 7.80 | | | | | | | |
| | **Sub Total =** | 137.80 | | | | | | | |
| | 8Km Lead, Loading and Unloading =(2*1.28*8)+57 | 77.48 | | | | | | | |
| | **Total Rate Rs. =** | **215.28** | | | | | | | |
| 2 | KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. (P.No-222,I No-27.18) | | | | | | | | |
| | **For Drain** | Cum | | | | | | | |
| | **Kenchenahalli** | | | | | | | | |
| | Kenchenahalli Main road to Dhobi Ghat Road | | 2 | 160.00 | 1.30 | 0.15 | 62.40 | | |
| | Munibairappa House to Yelahanka Lake | | 2 | 350.00 | 1.20 | 0.15 | 126.00 | | |
| | For RCC Culvert | | 1 | 4.80 | 1.40 | 0.15 | 1.01 | | |
| | **For CC Road** | | | | | | | | |
| | **Kenchenahalli** | | | | | | | | |
| | Connecting to Kenchenahalli main Road | | 1 | 165.00 | 5.00 | 0.15 | 123.75 | | |
| | | | | | | | **313.16** | 5421.90 | **1697911.36** |
| | Basic Rate Rs.= | 5115.00 | | | | | | | |
| | Add 6% A.W Rs. = | 306.90 | | | | | | | |
| | **Total Rate Rs. =** | **5421.90** | | | | | | | |

| Sl No | Description of work | Unit | No | Length m | Breadth m | Depth m | Quantity | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| 3 | Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compcted for walls and bottom including centring shuttering cost of material HOM of machinary curing etc., complete execluding cost of steel as per MORTH specification no. 1500, 1700, 2200 including cost of material labour HOM complete as per specification. (P.No.271, I.No.37.59.2 of PW, P&IWTD S.R 2018-19) | | | | | | | | |
| | **For RCC Drain** | Cum | | | | | | | |
| | **Kenchenahalli** | | | | | | | | |
| | **Bottom slab** | | | | | | | | |
| | Kenchenahalli Main road to Dhobi Ghat Road | | 2 | 160.00 | 1.20 | 0.15 | 57.60 | | |
| | Munibairappa House to Yelahanka Lake | | 1 | 350.00 | 1.10 | 0.15 | 57.75 | | |
| | **Side walls** | | | | | | | | |
| | Kenchenahalli Main road to Dhobi Ghat Road | | 4 | 160.00 | 0.15 | 0.75 | 72.00 | | |
| | Munibairappa House to Yelahanka Lake | | 2 | 350.00 | 0.15 | 0.60 | 63.00 | | |
| | | | | | | | **250.35** | | |
| | For RCC Culvert | | | | | | | | |
| | Raft | | 1 | 4.80 | 1.20 | 0.20 | 1.15 | | |
| | side walls | | 2 | 4.80 | 0.20 | 0.60 | 1.15 | | |
| | | | | | | | **2.30** | | |
| | | | | | Net Qty. | | **252.65** | 7070.20 | **1786314.31** |
| | Basic Rate Rs.= | 6670.00 | | | | | | | |
| | Add 6% A.W Rs. = | 400.20 | | | | | | | |
| | **Total Rate Rs. =** | **7070.20** | | | | | | | |
| 4 | KSRRB - M2300-14: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.MORTH Specification No. 1600 & 2200 for TMT bars Fe 500. (P.No.239, I.No.29.29.2 of PW, P&IWTD S.R 2018-19) | | | | | | | | |
| | Considering steel For Drain @ 60kg / cum | Tonne | | 250.35 | 0.060 | -- | 15.02 | | |
| | Considering steel For Culvert @ 90 kg / cum | | | 2.30 | 0.090 | -- | 0.21 | | |
| | | | | | | | **15.23** | 73992.24 | **1126780.47** |
| | Basic Rate Rs.= | 69804.00 | | | | | | | |
| | Add 6% A.W Rs. = | 4188.24 | | | | | | | |
| | **Total Rate Rs. =** | **73992.24** | | | | | | | |

| Sl No | Description of work | Unit | No | Length m | Breadth m | Depth m | Quantity | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| 5 | Providing and fixing RCC precast cover slab of 100mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate) | | | | | | | | |
| | For drain cover slab | Sqm | | | | | | | |
| | **Kenchenahalli** | | | | | | | | |
| | Kenchenahalli Main road to Dhobi Ghat Road | | 2 | 160.00 | 1.20 | -- | 384.00 | | |
| | Munibairappa House to Yelahanka Lake | | 1 | 350.00 | 1.10 | -- | 385.00 | | |
| | | | | | | | **769.00** | 2337.00 | **1797153.00** |
| 6 | Providing and fixing RCC precast cover slab of 250mm thick made out of CC 1:2:4 and jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate) | | | | | | | | |
| | For Culvert Slabs | Sqm | 1 | 4.80 | 1.20 | -- | **5.76** | 5418.00 | **31207.68** |
| 7 | KSRB 4-1.6 ; Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No-13,I No-4.6) | | | | | | | | |
| | **For Kerb stone** | Cum | | | | | | | |
| | Kenchenahalli Main road to Dhobi Ghat Road | | 2 | 350 | 0.20 | 0.10 | 14.00 | | |
| | Connecting to Kenchenahalli main Road | | 2 | 165.00 | 0.20 | 0.10 | 6.60 | | |
| | | | | | | | **20.60** | 5747.32 | **118394.79** |
| | Basic Rate Rs.= | 5422.00 | | | | | | | |
| | Add 6% A.W Rs. = | 325.32 | | | | | | | |
| | **Total Rate Rs. =** | **5747.32** | | | | | | | |
| 8 | Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. As per the direction of Engineer incharge. (P.No.27, I.No.5.30 of PW, P&IWTD SR 2018-19) | | | | | | | | |
| | **For Drain** | Nos | | | | | | | |
| | Kenchenahalli Main road to Dhobi Ghat Road | | 2 | 350 | | | 700.00 | | |
| | Connecting to Kenchenahalli main Road | | 2 | 165.00 | | | 330.00 | | |
| | | | | | | | 1030.00 | | |
| | | | | | | | **2289.00** | 432.48 | **989946.72** |
| | Basic Rate Rs.= | 408.00 | | | | | | | |
| | Add 6% A.W Rs. = | 24.48 | | | | | | | |
| | **Total Rate Rs. =** | **432.48** | | | | | | | |

| Sl No | Description of work | Unit | No | Length m | Breadth m | Depth m | Quantity | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| 9 | Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 Specification No. KSRRB M800-6. (P.No.180, I.No.24.1 of PW, P&IWTD SR 2018-19) | | | | | | | | |
| | **For Drain** | Sqm | | | | | | | |
| | Kenchenahalli Main road to Dhobi Ghat Road | | 2 | 350 | 0.45 | | 315.00 | | |
| | Connecting to Kenchenahalli main Road | | 2 | 165.00 | 0.45 | | 148.50 | | |
| | | | | | | | **463.50** | 84.80 | **39304.80** |
| | Basic Rate Rs.= | 80.00 | | | | | | | |
| | Add 6% A.W Rs. = | 4.80 | | | | | | | |
| | **Total Rate Rs. =** | **84.80** | | | | | | | |
| 10 | KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= ( I No-19.14,P No-143) | | | | | | | | |
| | **For CC Road** | Cum | | | | | | | |
| | **Kenchenahalli** | | | | | | | | |
| | Connecting to Kenchenahalli main Road | | 1 | 165.00 | 5.00 | 0.40 | 330.00 | | |
| | | | | | | | **330.00** | 63.94 | **21100.20** |
| | Basic Rate Rs.= | 41.00 | | | | | | | |
| | Add 6% A.W Rs. = | 2.46 | | | | | | | |
| | **Sub Total =** | 43.46 | | | | | | | |
| | 8Km Lead=(2*1.28*8) | 20.48 | | | | | | | |
| | **Total Rate Rs. =** | **63.94** | | | | | | | |
| 11 | KSRRB M300-52.2. Scarifying the Existing Bituminous surface to a depth of 50mm by Mechanical Means. Scarifying the existing bituminous road surface to a depth of 50mm and disposal of scarified material and complete as per specifications. MORTH Specification No. 305.4.3(P-146 , I.no 19.59). | | | | | | | | |
| | Connecting to Kenchenahalli main Road | Sqm | 1 | 165.00 | 5.00 | | 825.00 | | |
| | | | | | | Say | 825.00 | 3.71 | **3060.75** |

| Sl No | Description of work | Unit | No | Length m | Breadth m | Depth m | Quantity | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| 12 | KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications.(I No-19.64,P No-147) | | | | | | | | |
| | **For CC Road** | Sqm | | | | | | | |
| | **Kenchenahalli** | | | | | | | | |
| | Connecting to Kenchenahalli main Road | | 1 | 165.00 | 5.00 | | 825.00 | | |
| | | | | | | | **825.00** | 6.36 | **5247.0** |
| | | | | | | | | | |
| | Basic Rate Rs.= | 6.00 | | | | | | | |
| | Add 6% A.W Rs. = | 0.36 | | | | | | | |
| | **Total Rate Rs. =** | **6.36** | | | | | | | |
| 13 | Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.( I No-20.5,P No-153) | | | | | | | | |
| | **For CC Road** | Cum | | | | | | | |
| | **Kenchenahalli** | | | | | | | | |
| | Connecting to Kenchenahalli main Road | | 1 | 165.00 | 5.00 | 0.15 | 123.75 | | |
| | | | | | | | **123.75** | 1994.92 | **246871.3** |
| | | | | | | | | | |
| | Basic Rate Rs.= | 1882.00 | | | | | | | |
| | Add 6% A.W Rs. = | 112.92 | | | | | | | |
| | **Total Rate Rs. =** | **1994.92** | | | | | | | |
| 14 | Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. (P.No-176,I No-22.6.1) | | | | | | | | |

| Sl No | Description of work | Unit | No | Length m | Breadth m | Depth m | Quantity | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| | **For CC Road** | Cum | | | | | | | |
| | **Kenchenahalli** | | | | | | | | |
| | Connecting to Kenchenahalli main Road | | 1 | 165.00 | 5.00 | 0.15 | 123.75 | | |
| | | | | | | | **123.75** | 5210.96 | **644856.30** |
| | | | | | | | | | |
| | Basic Rate Rs.= | 4916.00 | | | | | | | |
| | Add 6% A.W Rs. = | 294.96 | | | | | | | |
| | **Total Rate Rs. =** | **5210.96** | | | | | | | |
| | | | | | | | Sub Total 1 Rs. | | **8707566.90** |
| | Add GST @ 12% | | | | | | | | **1044908.03** |
| | DPR & PMC Charges including GST | | | | | | | | **146959.25** |
| | | | | | | | Sub Total 2 Rs. | | **9899434.18** |
| | Miscellaneous & Rounding off | | | | | | | | 565.82 |
| | | | | | | | | Total Rs. | **9900000.00** |

**CERTIFICATE:**

1. The work spot has been inspected by me and the work is found to be necessary.
2. The estimate is prepared as per PW, P&IWTD S.R Bangalore circle for the year 2018-2019.
3. The Provisions made in the estimate are quite necessary and adequate.
4. The area comes with in the BBMP limits.

| Assistant Engineer | Assistant Executive Engineer | Executive Engineer |
|---|---|---|
| Project Division Yelahanka | Project Division Yelahanka | Project Division Yelahanka |
| BBMP | BBMP | BBMP |

4/11/19

# BRUHAT BANGALORE MAHANAGARA PALIKE

## Name of Work: Developments of roads and drains at cross roads of Nagenahalli Surrounding in Ward No. 02

| Sl No | Description of work | Unit | No | Length m | Breadth m | Depth m | Quantity | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| 1 | KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (P.No-143, I.No-19.1) | | | | | | | | |
| | **For RCC Drain** | Cum | | | | | | | |
| | **Nagenahalli** | | | | | | | | |
| | Nagenahalli Cross to Patel Shamanna Layout | | 1 | 350.00 | 1.30 | 1.10 | 500.50 | | |
| | Patel shamanna layout 3rd A cross Road | | 2 | 138.00 | 1.10 | 1.10 | 333.96 | | |
| | For RCC Culvert | | 3 | 5.00 | 1.40 | 1.00 | 21.00 | | |
| | | | | | | | **855.46** | 215.28 | **184163.43** |
| | Basic Rate Rs.= | 130.00 | | | | | | | |
| | Add 6% A.W Rs. = | 7.80 | | | | | | | |
| | **Sub Total =** | 137.80 | | | | | | | |
| | 8Km Lead, Loading and Unloading =(2*1.28*8)+57 | 77.48 | | | | | | | |
| | **Total Rate Rs. =** | **215.28** | | | | | | | |
| 2 | KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. (P.No-222,I No-27.18) | | | | | | | | |
| | **For Drain** | Cum | | | | | | | |
| | **Nagenahalli** | | | | | | | | |
| | Nagenahalli Cross to Patel Shamanna Layout | | 1 | 350.00 | 1.30 | 0.15 | 68.25 | | |
| | Patel shamanna layout 3rd A cross Road | | 2 | 138.00 | 1.10 | 0.15 | 45.54 | | |
| | For RCC Culvert | | 3 | 5.00 | 1.40 | 0.15 | 3.15 | | |
| | **For CC Road** | | | | | | | | |
| | **Nagenahalli** | | | | | | | | |
| | Yajmaan layout 1st cross | | 1 | 190.00 | 5.00 | 0.15 | 142.50 | | |
| | Patel shamanna layout 3rd A cross Road | | 1 | 138.00 | 5.10 | 0.15 | 105.57 | | |
| | | | | | | | **365.01** | 5421.90 | **1979047.72** |
| | Basic Rate Rs.= | 5115.00 | | | | | | | |
| | Add 6% A.W Rs. = | 306.90 | | | | | | | |
| | **Total Rate Rs. =** | **5421.90** | | | | | | | |

| Sl No | Description of work | Unit | No | Length m | Breadth m | Depth m | Quantity | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| 3 | Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compcted for walls and bottom including centring shuttering cost of material HOM of machinary curing etc., complete execluding cost of steel as per MORTH specification no. 1500, 1700, 2200 including cost of material labour HOM complete as per specification. (P.No.271, I.No.37.59.2 of PW, P&IWTD S.R 2018-19) | | | | | | | | |
| | **For RCC Drain** | Cum | | | | | | | |
| | **Nagenahalli** | | | | | | | | |
| | **Bottom slab** | | | | | | | | |
| | Nagenahalli Cross to Patel Shamanna Layout | | 1 | 350.00 | 1.20 | 0.15 | 63.00 | | |
| | Patel shamanna layout 3rd A cross Road | | 2 | 138.00 | 0.90 | 0.15 | 37.26 | | |
| | **Side walls** | | | | | | | | |
| | Nagenahalli Cross to Patel Shamanna Layout | | 2 | 350.00 | 0.15 | 0.75 | 78.75 | | |
| | Patel shamanna layout 3rd A cross Road | | 4 | 138.00 | 0.15 | 0.60 | 49.68 | | |
| | | | | | | | **228.69** | | |
| | For RCC Culvert | | | | | | | | |
| | Raft | | 3 | 5.00 | 1.20 | 0.20 | 3.60 | | |
| | side walls | | 6 | 5.00 | 0.20 | 0.60 | 3.60 | | |
| | | | | | | | **7.20** | | |
| | | | | | Net Qty. | | **235.89** | 7070.20 | **1667789.48** |
| | | | | | | | | | |
| | Basic Rate Rs.= | 6670.00 | | | | | | | |
| | Add 6% A.W Rs. = | 400.20 | | | | | | | |
| | **Total Rate Rs. =** | **7070.20** | | | | | | | |
| | | | | | | | | | |
| 4 | KSRRB - M2300-14: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.MORTH Specification No. 1600 & 2200 for TMT bars Fe 500. (P.No.239, I.No.29.29.2 of PW, P&IWTD S.R 2018-19) | | | | | | | | |
| | Considering steel For Drain @ 60kg / cum | Tonne | | 228.69 | 0.060 | -- | 13.72 | | |
| | Considering steel For Culvert @ 90 kg / cum | | | 7.20 | 0.090 | -- | 0.65 | | |
| | | | | | | | **14.37** | 73992.24 | **1063224.09** |
| | | | | | | | | | |
| | Basic Rate Rs.= | 69804.00 | | | | | | | |
| | Add 6% A.W Rs. = | 4188.24 | | | | | | | |
| | **Total Rate Rs. =** | **73992.24** | | | | | | | |
| | | | | | | | | | |

| Sl No | Description of work | Unit | No | Length m | Breadth m | Depth m | Quantity | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| 5 | Providing and fixing RCC precast cover slab of 100mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate) | | | | | | | | |
| | For drain cover slab | Sqm | | | | | | | |
| | **Nagenahalli** | | | | | | | | |
| | Nagenahalli Cross to Patel Shamanna Layout | | 1 | 350.00 | 1.20 | -- | 420.00 | | |
| | Patel shamanna layout 3rd A cross Road | | 2 | 138.00 | 0.90 | -- | 248.40 | | |
| | | | | | | | **668.40** | 2337.00 | **1562050.80** |
| 6 | Providing and fixing RCC precast cover slab of 250mm thick made out of CC 1:2:4 and jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate) | | | | | | | | |
| | For Culvert Slabs | Sqm | 3 | 5.00 | 1.20 | -- | **18.00** | 5418.00 | **97524.00** |
| 7 | KSRB 4-1.6 ; Providing and laying in position plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No-13,I No-4.6) | | | | | | | | |
| | **For Kerb stone** | Cum | | | | | | | |
| | Nagenahalli Cross to Patel Shamanna Layout | | | | | | | | |
| | Patel shamanna layout 3rd A cross Road | | 2 | 138.00 | 0.20 | 0.10 | 5.52 | | |
| | | | | | | | **5.52** | 5747.32 | **31725.21** |
| | Basic Rate Rs.= | 5422.00 | | | | | | | |
| | Add 6% A.W Rs. = | 325.32 | | | | | | | |
| | **Total Rate Rs. =** | **5747.32** | | | | | | | |
| 8 | Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114.and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. As per the direction of Engineer incharge. (P.No.27, I.No.5.30 of PW, P&IWTD SR 2018-19) | | | | | | | | |
| | **For Drain** | Nos | | | | | | | |
| | Nagenahalli Cross to Patel Shamanna Layout | | | | | | | | |
| | Patel shamanna layout 3rd A cross Road | | 2 | 138.00 | | | 276.00 | | |
| | | | | | | | 276.00 | | |
| | | | | | | | **613.00** | 432.48 | **265110.24** |
| | Basic Rate Rs.= | 408.00 | | | | | | | |
| | Add 6% A.W Rs. = | 24.48 | | | | | | | |
| | **Total Rate Rs. =** | **432.48** | | | | | | | |

| Sl No | Description of work | Unit | No | Length m | Breadth m | Depth m | Quantity | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| 9 | Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 Specification No. KSRRB M800-6. (P.No.180, I.No.24.1 of PW, P&IWTD SR 2018-19) | | | | | | | | |
| | **For Drain** | Sqm | | | | | | | |
| | Nagenahalli Cross to Patel Shamanna Layout | | | | | | | | |
| | Patel shamanna layout 3rd A cross Road | | 2 | 138.00 | 0.45 | | 124.20 | | |
| | | | | | | | **124.20** | 84.80 | **10532.16** |
| | Basic Rate Rs.= | 80.00 | | | | | | | |
| | Add 6% A.W Rs. = | 4.80 | | | | | | | |
| | **Total Rate Rs. =** | **84.80** | | | | | | | |
| 10 | KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= ( I No-19.14,P No-143) | | | | | | | | |
| | **For CC Road** | Cum | | | | | | | |
| | **Nagenahalli** | | | | | | | | |
| | Yajmaan layout 1st cross | | 1 | 190.00 | 5.00 | 0.40 | 380.00 | | |
| | Patel shamanna layout 3rd A cross Road | | 1 | 138.00 | 5.10 | 0.40 | 281.52 | | |
| | | | | | | | **661.52** | 63.94 | **42297.59** |
| | Basic Rate Rs.= | 41.00 | | | | | | | |
| | Add 6% A.W Rs. = | 2.46 | | | | | | | |
| | **Sub Total =** | 43.46 | | | | | | | |
| | 8Km Lead=(2*1.28*8) | 20.48 | | | | | | | |
| | **Total Rate Rs. =** | **63.94** | | | | | | | |
| 11 | KSRRB M300-52.2. Scarifying the Existing Bituminous surface to a depth of 50mm by Mechanical Means. Scarifying the existing bituminous road surface to a depth of 50mm and disposal of scarified material and complete as per specifications. MORTH Specification No. 305.4.3(P-146 , I.no 19.59). | | | | | | | | |
| | Yajmaan Layout 1st Cross | Sqm | 1 | 175 | 5.00 | | 875.00 | | |
| | Patel Shamanna Layout 3rd A Cross Road | Sqm | 1 | 131 | 5.10 | | 668.10 | | |
| | | | | | | Say | 1543.10 | 3.71 | 5724.901 |
| 12 | KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications.(I No-19.64,P No-147) | | | | | | | | |
| | **For CC Road** | Sqm | | | | | | | |
| | **Nagenahalli** | | | | | | | | |
| | Yajmaan layout 1st cross | | 1 | 190.00 | 5.00 | | 950.00 | | |
| | Patel shamanna layout 3rd A cross Road | | 1 | 138.00 | 5.10 | | 703.80 | | |
| | | | | | | | **1653.80** | 6.36 | **10518.17** |
| | Basic Rate Rs.= | 6.00 | | | | | | | |
| | Add 6% A.W Rs. = | 0.36 | | | | | | | |
| | **Total Rate Rs. =** | **6.36** | | | | | | | |

| Sl No | Description of work | Unit | No | Length m | Breadth m | Depth m | Quantity | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| 13 | Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.( I No-20.5,P No-153) | | | | | | | | |
| | **For CC Road** | Cum | | | | | | | |
| | **Nagenahalli** | | | | | | | | |
| | Yajmaan layout 1st cross | | 1 | 190.00 | 5.00 | 0.15 | 142.50 | | |
| | Patel shamanna layout 3rd A cross Road | | 1 | 138.00 | 5.10 | 0.15 | 105.57 | | |
| | | | | | | | **248.07** | 1994.92 | **494879.80** |
| | | | | | | | | | |
| | Basic Rate Rs.= | 1882.00 | | | | | | | |
| | Add 6% A.W Rs. = | 112.92 | | | | | | | |
| | **Total Rate Rs. =** | **1994.92** | | | | | | | |

| Sl No | Description of work | Unit | No | Length m | Breadth m | Depth m | Quantity | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| 14 | Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. (P.No-176,I No-22.6.1) | | | | | | | | |
| | **For CC Road** | Cum | | | | | | | |
| | **Nagenahalli** | | | | | | | | |
| | Yajmaan layout 1st cross | | 1 | 190.00 | 5.00 | 0.15 | 142.50 | | |
| | Patel shamanna layout 3rd A cross Road | | 1 | 138.00 | 5.10 | 0.15 | 105.57 | | |
| | | | | | | | **248.07** | 5210.96 | **1292682.85** |
| | | | | | | | | | |
| | Basic Rate Rs.= | 4916.00 | | | | | | | |
| | Add 6% A.W Rs. = | 294.96 | | | | | | | |
| | **Total Rate Rs. =** | **5210.96** | | | | | | | |
| | | | | | | | Sub Total 1 Rs. | | **8707270.44** |
| | Add GST @ 12% | | | | | | | | **1044872.45** |
| | DPR & PMC Charges including GST | | | | | | | | **147684.56** |
| | | | | | | | Sub Total 2 Rs. | | **9899827.45** |
| | Miscellaneous & Rounding off | | | | | | | | 172.55 |
| | | | | | | | | Total Rs. | **9900000.00** |

**CERTIFICATE:**

1. The work spot has been inspected by me and the work is found to be necessary.
2. The estimate is prepared as per PW, P&IWTD S.R Bangalore circle for the year 2018-2019.
3. The Provisions made in the estimate are quite necessary and adequate.
4. The area comes with in the BBMP limits.

| Assistant Engineer | Assistant Executive Engineer | Executive Engineer |
|---|---|---|
| Project Division Yelahanka | Project Division Yelahanka | Project Division Yelahanka |
| BBMP | BBMP | BBMP |

4/11/19

## BRUHAT BANGALORE MAHANAGARA PALIKE

### Name of Work: Developments of roads and drains at cross roads of GPN Colony Surrounding in Ward No. 02

| Sl No | Description of work | Unit | No | Length m | Breadth m | Depth m | Quantity | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| 1 | KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (P.No-143, I.No-19.1) | | | | | | | | |
| | **For RCC Drain** | Cum | | | | | | | |
| | **GPN Colony** | | | | | | | | |
| | GPN COLONY (Beside Railway Station) | | 2 | 343.00 | 1.30 | 1.10 | 980.98 | | |
| | For RCC Culvert | | 1 | 5.00 | 1.40 | 1.00 | 7.00 | | |
| | | | | | | | **987.98** | 215.28 | **212692.33** |
| | | | | | | | | | |
| | Basic Rate Rs.= | 130.00 | | | | | | | |
| | Add 6% A.W Rs. = | 7.80 | | | | | | | |
| | **Sub Total =** | 137.80 | | | | | | | |
| | 8Km Lead, Loading and Unloading =(2*1.28*8)+57 | 77.48 | | | | | | | |
| | **Total Rate Rs. =** | **215.28** | | | | | | | |
| | | | | | | | | | |
| 2 | KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. (P.No-222,I No-27.18) | | | | | | | | |
| | **For Drain** | Cum | | | | | | | |
| | **GPN Colony** | | | | | | | | |
| | GPN COLONY (Beside Railway Station) | | 2 | 343.00 | 1.30 | 0.15 | 133.77 | | |
| | For RCC Culvert | | 1 | 5.00 | 1.40 | 0.15 | 1.05 | | |
| | **For CC Road** | | | | | | | | |
| | **GPN Colony** | | | | | | | | |
| | GPN COLONY (Beside Railway Station) | | 1 | 343.00 | 3.80 | 0.15 | 195.51 | | |
| | | | | | | | **330.33** | 5421.90 | **1791016.23** |
| | | | | | | | | | |
| | Basic Rate Rs.= | 5115.00 | | | | | | | |
| | Add 6% A.W Rs. = | 306.90 | | | | | | | |
| | **Total Rate Rs. =** | **5421.90** | | | | | | | |
| | | | | | | | | | |

| Sl No | Description of work | Unit | No | Length m | Breadth m | Depth m | Quantity | Rate in Rs | Amount in Rs |
|---|---|---|---|---|---|---|---|---|---|
| 3 | Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compcted for walls and bottom including centring shuttering cost of material HOM of machinary curing etc., complete execluding cost of steel as per MORTH specification no. 1500, 1700, 2200 including cost of material labour HOM complete as per specification. (P.No.271, I.No.37.59.2 of PW, P&IWTD S.R 2018-19) | | | | | | | | |
| | **For RCC Drain** | Cum | | | | | | | |
| | **GPN Colony** | | | | | | | | |
| | **Bottom slab** | | | | | | | | |
| | GPN COLONY (Beside Railway Station) | | 2 | 343.00 | 1.20 | 0.15 | 123.48 | | |
| | **Side walls** | | | | | | | | |
| | GPN COLONY (Beside Railway Station) | | 4 | 343.00 | 0.15 | 0.75 | 154.35 | | |
| | | | | | | | **277.83** | | |
| | For RCC Culvert | | | | | | | | |
| | Raft | | 1 | 5.00 | 1.20 | 0.20 | 1.20 | | |
| | side walls | | 2 | 5.00 | 0.20 | 0.60 | 1.20 | | |
| | | | | | | | **2.40** | | |
| | | | | | Net Qty. | | **280.23** | 7070.20 | **1981282.15** |
| | | | | | | | | | |
| | Basic Rate Rs.= | 6670.00 | | | | | | | |
| | Add 6% A.W Rs. = | 400.20 | | | | | | | |
| | **Total Rate Rs. =** | **7070.20** | | | | | | | |
| | | | | | | | | | |
| 4 | KSRRB - M2300-14: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.MORTH Specification No. 1600 & 2200 for TMT bars Fe 500. (P.No.239, I.No.29.29.2 of PW, P&IWTD S.R 2018-19) | | | | | | | | |
| | Considering steel For Drain @ 60kg / cum | Tonne | | 277.83 | 0.060 | -- | 16.67 | | |
| | Considering steel For Culvert @ 90 kg / cum | | | 2.40 | 0.090 | -- | 0.22 | | |
| | | | | | | | **16.89** | 73992.24 | **1249418.17** |
| | | | | | | | | | |
| | Basic Rate Rs.= | 69804.00 | | | | | | | |
| | Add 6% A.W Rs. = | 4188.24 | | | | | | | |
| | **Total Rate Rs. =** | **73992.24** | | | | | | | |
| | | | | | | | | | |